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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,867	10/31/2003	David R. Hall	66.0039	2866

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JEFFREY E. DALY
GRANT PRIDECO, L.P.
400 N. SAM HOUSTON PARKWAY EAST
SUITE 900
HOUSTON, TX 77060

EXAMINER	
HEWITT, JAMES M	

ART UNIT	PAPER NUMBER
3679	

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/605,867	HALL ET AL.	
	Examiner	Art Unit	
	James M Hewitt	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/31/03, 4/20/04 and 6/1/04*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 October 2003* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/20/04 and 6/1/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The "S-signature" for each inventor must appear between forward slashes.

Information Disclosure Statement

Applicant is urged to submit any co-pending applications that could be considered material to the examination of the instant invention.

Specification

The disclosure is objected to because of the following informalities:

In lines 4-5 of paragraph [0036], "17" should be replaced with "34" and vice versa.

In paragraph [0039] line 9, it seems as if "Fig. 5" should be replaced with "Fig. 11" as figure 5 does not illustrate a tool joint as described.

In paragraph [0040] line 10, it seems as if "Fig. 5" should be replaced with "Fig. 11" as figure 5 does not illustrate a tool joint as described.

In paragraph [0041] line 12, it seems as if "Fig. 5" should be replaced with "Fig. 11" as figure 5 does not illustrate a tool joint as described.

In paragraph [0042] line 11, it seems as if "Fig. 5" should be replaced with "Fig. 11" as figure 5 does not illustrate a tool joint as described.

Appropriate correction is required.

Drawings

The drawings are objected to because it is unclear as to whether Figures 2 and 4 are prior art as they are not described as embodiments of the instant invention in the "Brief Description of the Drawings". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1-15 are objected to because of the following informalities:

In claim 1 line 8, the phrase "being attached to the upset on the tube" should be replaced with the phrase "and the tube being attached" for clarity.

In claim 4 line 5, the phrase "between the tool joint and the upset" should be deleted for clarity.

It seems as if claim 12 should depend from claim 11 as claim 12 references the welding of the tool joint to the tube.

In claim 15 line 2, "form" should be "from".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-6 and 8-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Denison et al (US 4,095,865).

With respect to claim 1, Denison et al discloses a downhole component, comprising: a tube (pin) having an inside diameter and an elongate, generally cylindrical tool joint (box) comprising a first interfacial surface and having a wall; an upset formed on an end of the tube comprising a second interfacial surface and having an effective inside diameter less than the inside diameter of the tube; the tool joint being attached to the upset on the tube at the first and second interfacial surfaces (abutment shoulders or threads) and an opening (13) formed within the wall of the tool joint in alignment with a passageway (12/37) formed in the upset; wherein the opening and the passageway allow passage of a transmission line between the tool joint and the tube.

With respect to claim 2, wherein the passageway formed in the upset is provided by varying a thickness of the upset. Refer to Figure 2. The diameter of the passageway varies, and thus the thickness of the upset varies.

With respect to claim 4, wherein the passageway formed in the upset is provided by at least a portion of the upset having a thickness that is less than the tool joint bore wall thickness at the first and second interfacial surfaces between the tool joint and the upset. Refer to Figure 2.

With respect to claim 5, wherein the passageway formed in the upset comprises a circumferential chamfer (as at 16) in at least a portion of the upset.

With respect to claim 6, wherein the passageway formed in the upset comprises a circumferential groove (as at 16) in at least a portion of the upset.

With respect to claim 8, wherein the passageway formed in the upset comprises an axial groove in at least a portion of the upset.

With respect to claim 9, wherein the passageway formed in the upset comprises an internal passageway intersecting the second interfacial surface (abutment shoulder) and a transition surface (as at 16) of the upset.

With respect to claim 10, wherein the passageway formed in the upset comprises one or more external passageways (as at 24) intersecting at the second interfacial surface and a transition surface (as at 16) of the upset.

With respect to claims 11 and 12, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, these limitations have not been given patentable weight.

With respect to claim 13, wherein the passageway formed in the upset allows passage of a transmission line that is in communication with a transmission coupler (25) located in the tool joint and is part of a downhole network for electrical transmission between downhole equipment and surface equipment.

With respect to claim 14, wherein the component is selected from the group consisting of drill pipe, heavyweight drill pipe, sub-assemblies, and drill collars.

With respect to claim 15, wherein the component is selected form the group consisting of drill bits, drill motors, logging while drilling tools, hole openers, stabilizers, under-reamers, rotary steerable systems, drilling jars, drilling shock absorbers, drilling turbines, sensor packages, and measuring while drilling tools.

With respect to claim 16, Denison et al discloses a downhole component comprising a tube (pin) with at least one passageway (12) formed in an upset that cooperates with an opening (13) in a tool joint (box) such that when the tube and the

tool joint are joined together, the passageway in the tube and the opening in the tool joint allow the passage of a transmission line from the tool joint to the tube.

Claims 1-2, 4-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Papadopoulos (US 3,518,608).

With respect to claim 1, Papadopoulos discloses a downhole component, comprising: a tube (box 13 of one drill pipe) having an inside diameter and an elongate, generally cylindrical tool joint (pin 12 of an adjoining drill pipe) comprising a first interfacial surface (abutment shoulder or threaded surface) and having a wall; an upset formed on an end of the tube comprising a second interfacial surface (abutment shoulder or threaded surface) and having an effective inside diameter less than the inside diameter of the tube; the tool joint being attached to the upset on the tube at the first and second interfacial surfaces and an opening (as for contact 31) formed within the wall of the tool joint in alignment with a passageway formed in the upset; wherein the opening and the passageway allow passage of a transmission line (21) between the tool joint and the tube.

With respect to claim 2, wherein the passageway formed in the upset is provided by varying a thickness of the upset. Refer to Figure 1.

With respect to claim 4, wherein the passageway formed in the upset is provided by at least a portion of the upset having a thickness that is less than the tool joint bore wall thickness at the first and second interfacial surfaces between the tool joint and the upset. Refer to Figure 1.

With respect to claim 5, wherein the passageway formed in the upset comprises a circumferential chamfer (convex taper) in at least a portion of the upset.

With respect to claim 6, wherein the passageway formed in the upset comprises a circumferential groove (as by one of thread grooves at 16) in at least a portion of the upset.

With respect to claim 7, wherein the passageway formed in the upset comprises a spiral groove (as by one of thread grooves at 16) in at least a portion of the upset.

With respect to claim 8, wherein the passageway formed in the upset comprises an axial groove in at least a portion of the upset.

With respect to claim 9, wherein the passageway formed in the upset comprises an internal passageway intersecting the second interfacial surface (as at 32) and a transition surface of the upset.

With respect to claim 10, wherein the passageway formed in the upset comprises one or more external passageways (as at 32) intersecting at the second interfacial surface and a transition surface of the upset. The passageway is external of the interior of the wall.

With respect to claims 11 and 12, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, these limitations have not been given patentable weight.

With respect to claim 13, wherein the passageway formed in the upset allows passage of a transmission line (21) that is in communication with a transmission coupler

(32) located in the tool joint and is part of a downhole network for electrical transmission between downhole equipment and surface equipment.

With respect to claim 14, wherein the component is selected from the group consisting of drill pipe, heavyweight drill pipe, sub-assemblies, and drill collars.

With respect to claim 15, wherein the component is selected form the group consisting of drill bits, drill motors, logging while drilling tools, hole openers, stabilizers, under-reamers, rotary steerable systems, drilling jars, drilling shock absorbers, drilling turbines, sensor packages, and measuring while drilling tools.

With respect to claim 16, Papadopoulos discloses a downhole component comprising a tube (box 13 of one drill pipe) with at least one passageway formed in an upset that cooperates with an opening (as for 31) in a tool joint (pin 12 of an adjoining drill pipe) such that when the tube and the tool joint are joined together, the passageway in the tube and the opening in the tool joint allow the passage of a transmission line (21) from the tool joint to the tube.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Denison et al (US 4,095,865).

Denison et al fails to teach that the passageway is provided by forming the effective inside diameter of the upset eccentric from a longitudinal axis of the tool joint. It would have been an obvious matter of design choice to form the effective inside diameter of Denison et al's upset eccentric from a longitudinal axis of the tool joint.

Applicant offers such a modification as a mere design alternative and fails to provide any significant purpose or unexpected results that arise from such a modification.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Papadopoulos (US 3,518,608).

Papadopoulos fails to teach that the passageway is provided by forming the effective inside diameter of the upset eccentric from a longitudinal axis of the tool joint. It would have been an obvious matter of design choice to form the effective inside diameter of Papadopoulos' upset eccentric from a longitudinal axis of the tool joint.

Applicant offers such a modification as a mere design alternative and fails to provide any significant purpose or unexpected results that arise from such a modification.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hewitt whose telephone number is 571-272-7084.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAMES M. HEWITT
PRIMARY EXAMINER